

TABLE 2.—Instrumental reports—Continued.

Date.	Char-acter.	Phase.	Time.	Period T	Amplitude.		Dis-tance.	Remarks.
					A _N	A _E		
Vermont. Northfield. U. S. Weather Bureau. Wm. A. Shaw.								
Lat., 44° 10' N.; long., 72° 41' W. Elevation, 256 meters.								
Instruments: Two Bosch-Omori, mechanical registration.								
Instrumental constants..					$\begin{matrix} V & T_0 \\ E & 10 \\ N & 16 \end{matrix}$			
1915 Nov. 1	I _a	P _N ?..... S..... eL..... F.....	H. m. s. 7 37 06 7 47 30 8 07 00 10 00 00	Sec.....	μ.....	μ.....	Km. 9,280?	
21	III.....	P?..... S..... L..... M _N M _E F.....	0 20 40 0 26 08 0 29 17 0 33 05 0 35 12 2 00 00	..... ..... 13.....	.....	.....	3,675?	Maxima on E-W more pronounced than on N-S.
26	.....	M..... F.....	19 35 05 19 45 00	.....	.....	.....	.....	Earthquake south-west of Panama. Beginning of all phases indiscernible.
30	.....	M..... F.....	5 04 19 5 06 40	.....	.....	.....	.....	All phases indistinct. Maximum very small.

Canada. Ottawa. Dominion Astronomical Observatory. Earthquake Station. Otto Klotz.

Lat., 45° 23' 38" N.; long., 75° 42' 57" W. Elevation, 83 meters.

Instruments: Two Bosch photographic horizontal pendulums, one Spindler & Hoyer 80 kg. vertical seismograph.

Instrumental constants: $\begin{matrix} V & T_0 \\ 120 & 26 \end{matrix}$

Date.	Char-acter.	Phase.	Time.	Period T	Amplitude.		Dis- tance.	Remarks.
					A _N	A _E		
1915. Nov. 1		P	7 37 03					Off Japan.
		S	7 47 30					
		SR ₁	7 53 35					
		L	8 07 36	40				
		L _N	8 10 00	20				
		M _N	8 17 00	20	28			
		M _E	8 23 00	20		52		Waves from anti-epicentershown well.
		M _N	8 24 00	16	28			
		M _E	8 27 00	16		56		
		L _N	8 33 00	14-16				
		L _E	9 04 00	20				
		L _R	9 51 00	20				
		L _R	9 56 00	20-18				
		F	10 30 00					
18		I _E	4 26 06					Strong microseisms mask N-S.
		eL _N	4 55 00					
		L _N	4 58 00	18				
		L _E	5 01 00	18				
		F	5 10 00					
21		P _N	0 20 34	2				3,520
		S	0 25 52					
		L _N	0 28 48	40				
		L _E	0 29 00					
		M _N	0 32 30			720		
		M _E	0 35 00		460			
		L	1 00 00	11				
		F	3 00 00					
VERTICAL.								
		M	0 54 00		(A _E) 650			
26		P _N	19 19 33	2				4,140
		S _N	19 25 28					
		S _E	19 25 30					
		L _E	19 30 48	30				
		L _N	19 34 00	20				
		L _E	19 35 00	18				
		L _E	19 36 00	14				
		F	19 47 00					

Date.	Char-acter.	Phase.	Time.	Period T	Amplitude.		Dis- tance.	Remarks.
					A _E	A _N		
Canada. <i>Ottawa, Dominion Astronomical Observatory</i> —Continued.								
1915								
Nov. 30	-----	P _N ?.....	4 53 09	2	-----	-----	3,900?	
		S _E ?.....	4 59 50		-----	-----	-----	
		S _N ?.....	4 59 51		-----	-----	-----	
		eL _E ?.....	5 03 24	(0	-----	-----	-----	
		L _E	5 03 00	40	-----	-----	-----	
		L _E	5 07 00	30	-----	-----	-----	
		L _E	5 08 00	20	-----	-----	-----	
		L _N	5 09 00	24	-----	-----	-----	
		L.....	5 10 00	20-18	-----	-----	-----	
		F.....	5 15 00		-----	-----	-----	

Canada. Toronto. Dominion Meteorological Service.

Lat., 43° 40' 01" N.; long., 79° 23' 54" W. Elevation, 113.7 meters. Subsoil: Sand and clay.

Instrument: Milne horizontal pendulum, North. In the meridian.

Instrumental constant.. $\begin{matrix} T_0 \\ 18. \end{matrix}$ Pillar deviation, 1 mm. swing of boom=0.59".

[Report for November, 1915, not received.]

Canada. Victoria, B. C. Dominion Meteorological Service.

Lat., 48° 24' N.; long., 123° 19' W. Elevation, 67.7 meters. Subsoil: Rock.

Instruments: Wiechert, vertical. Milne horizontal pendulum, North. In the meridian.

Instrumental constant.. $\begin{matrix} T_0 \\ 18. \end{matrix}$ Pillar deviation: 1 mm. swing of boom=0.54".

[Report for November, 1915, not received.]

SEISMOLOGICAL DISPATCHES.¹

Rome, via Paris, Nov. 14, 1915.

The royal observatory at Catania reports that the volcano of Stromboli was in violent eruption at 9 o'clock yesterday morning, according to the Stefani agency. Great blocks of lava and ashes have fallen over the entire island. The town of Lipari, on the island of the same name, felt a shock which lasted for a short time. (Assoc. Press.)

Los Angeles, Cal., Nov. 20, 1915.

Accompanying an earthquake shock that rocked the southwest, damaged buildings in Mexico and the Imperial Valley, a volcano at Andrade, Mexico, across the line from Yuma, sprang into activity this afternoon. The shocks were felt as far north as San Diego and reported more or less heavy in all parts of the Imperial Valley. In Mexico they were reported strong. At Calexico walls were cracked and buildings damaged. (Assoc. Press; United Press.)

Canal Zone, Panama, Dec. 1, 1915. (See above Table 2. p. —.)

Ten distinct seismic disturbances were recorded at the Balboa Heights observatory during the four days from November 26 to November 29, inclusive. The first shock, intensity V on the Rossi-Forel scale of I to X, was the heaviest and was similar in many ways to the disturbance that occurred on October 1, 1913. The shocks that followed were comparatively light. The indicated distances of the disturbances varied, but all seem to have had a common origin about 195 to 225 kilometers southwest of Balboa Heights, probably in the neighborhood of Los Santos province. The disturbance that was recorded about midnight of November 29 was over 320 kilometers away, but in all probability occurred along the same fault as those previously recorded. (Assoc. Press.)

¹ Reported by the organization indicated and collected by the seismological station at Georgetown University, Washington, D. C.